

# All Hands HERALD

April 2006

DEPARTMENT OF FIRE SERVICE • STOW, MASSACHUSETTS

**Public Education**

**CPSC Recalls**

**Information  
Technology**

**Code Compliance  
& Enforcement**

## **Key Features**

**New Regulations for  
Carbon Monoxide Alarms**

**New Ticketing Procedures  
for Fire and Building Codes**

**Fire Investigation Unit**

**Massachusetts  
Firefighting Academy**

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## About the *All Hands Herald*

The Department of Fire Services newsletter has been re-established with a new *look and feel*. The intent is to produce a high quality, visual and extremely informative quarterly newsletter that will combine useful and timely information with a training schedule for Fire Academy training programs.

Along with the visual changes, the new name ***All Hands Herald*** is meant to incorporate the traditional fire service meaning - all hands working to extinguish the fire. In the case of our newsletter, all hands includes the DFS staff providing each of you with information, training and assistance in dealing with the fire service issues which confront all levels of the fire service.

We hope that you enjoy our new look and feel and we encourage you to let us know how you like the ***All Hands Herald*** and what we can do to make it even more useful to you – our dedicated fire service members and customers. If you have suggestions, ideas, questions or want to make a contribution to the ***All Hands Herald***, contact Jennifer Mieth at 978-567- 3381 or Donna Nelson at 978-567-3149.  
[Jennifer.Mieth@state.ma.us](mailto:Jennifer.Mieth@state.ma.us)  
or [Donna.Nelson@state.ma.us](mailto:Donna.Nelson@state.ma.us)  
ma.us ♦

## From the Fire Marshal



Last fall the Department of Fire Services worked closely with members of the Legislature, the fire chiefs and the Administration to create a new law requiring carbon monoxide (CO) alarms in most residential properties in Massachusetts. The Legislation outlined the requirements and directed the Board of Fire Prevention Regulations (BFPR) to develop the specifics of the implementation strategy – what kind, where, how many, etc. Our staff worked closely with the BFPR subcommittee that developed the technical standards and I formed a focus group to work with them on crafting the best possible regulation. They worked diligently through the holiday season and the board adopted the first phase of the regulation on February 2. The regulatory process is not yet complete as the board considers hard-wired requirements for large-scale residential and institutional structures. We continue to rely on the expertise and input of stakeholders who participate in focus groups to successfully implement the second regulation.

Several divisions within DFS have

partnered to deliver training throughout the state to fire departments on implementation of the regulations and guidance on protocols for fire department response to CO calls. Given the short time-frame, we are working diligently to spread the word to the public and to give tools to local fire departments and others to help notify the public. The deadline for most homes to have CO alarms installed was 3/31/06.

### **2004 Annual Statistical Report Released**

One of the goals of DFS is to furnish the administration, the fire service, and the public with useful information about the fire experience in Massachusetts. Collecting accurate and timely data about fires, fire causes and how people are injured and killed is imperative for decision makers to make informed and effective policy, and for the average citizen to learn how to protect themselves and their family.

### **New Record Low Number of Fire Deaths in 2004**

We recently published the *2004 MFIRS Annual Report*. The total number of fires increased to 29,462 in 2004, a 6% increase from the previous year. No firefighters lost their life while fighting a fire. Unfortunately 52 civilians died in 46 Massachusetts fires during 2004, this is a 15% decrease from the previous year. This is the lowest recorded number of fire-related fatalities since World War II. A disturbing statistic is that 25% of all residential fire victims were not alerted by smoke detectors. One-third of these cases were due to disabled smoke alarms, the

## BFPR Issues New Regs for CO Alarms

On February 2, 2006, State Fire Marshal Stephen D. Coan and Board of Fire Prevention Regulations (BFPR) Chairman David Demers announced that the board had passed emergency regulations on carbon monoxide alarms. The Legislature directed the BFPR to draft regulations as part of the recently enacted "Nicole's Law" that requires carbon monoxide alarms in all homes with potential sources of carbon monoxide – those with fossil-fuel burning equipment or enclosed parking areas.

Coan said, "These regulations bring us another step closer to full implementation of this law. The Department of Fire Services will be working with a consortium of fire,

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## New Ticketing Procedure for Fire and Building Codes

One of the major changes in fire safety brought about by the Massachusetts Fire Safety Act (Chapter 304 of the Acts of the 2004) is the ability to write tickets for fire and building code violations rather than prosecute violations in district or housing court. While the option to take a case to court remains, now only the most egregious cases will go to court where they compete with crimes with a more immediate impact on public safety. These standardized code violation notices are similar to traffic tickets. The uniform system will help simplify enforcement efforts and document habitual offenders. In addition to the fines associated with the tickets, violations will result in suspension or revocation of local or state permits, certificates or licenses giving more strength to code enforcement efforts. The fines collected from these tickets will provide funding to municipalities, the Department

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other two-thirds did not have any smoke alarms at all; these people mistakenly thought fire wouldn't happen to them.

Smoking has been the leading cause of fatal fires as far back as the 1940's. Smoking was still the leading cause of fire deaths in 2004, accounting for 16% of the total fire deaths. It was responsible for 19% of the fatal fires in 2004.

The leading cause of fires in the home in 2004 was cooking, which caused half of all residential fires.

### **RIP Cigarette Legislation**

There is legislation before both the House and Senate to create a "resistant ignition propensity" or self-extinguishing cigarette. This is modeled on the highly successful New York State, Canadian and Vermont laws. There is a coalition of people in Massachusetts working on this important step to protect lives and property from fire. One weekend in February our agency responded to three separate fires started by improper use and disposal of smoking materials; one of these fires killed an elderly couple. These fires, which are just a few examples, underscore the need for this life saving legislation.

### **Facility**

Progress on the DFS facility expansion project is moving forward. This is a long-term project and a watershed one for the state's fire training system, the fire service and the public who use our services and our staff. We are working closely with the architect and are one year away from beginning actual construction. I am excited about what this project will mean long-term for the expanding role of the Department of Fire Services. ♦

of Fire Services, and the Department of Public Safety for training of fire and building inspectors.

### **Courts Involved in Designing the Ticketing Process**

The Department of Fire Services and the Department of Public Safety worked closely with the courts in order to design the ticketing system to ensure it would work smoothly upon implementation.

### **Local Hearing Officer**

In order for local fire and building officials to implement this new ticketing procedure they must first establish an independent local hearing officer who cannot be an active staff member of the fire or building department. The hearing officer may be paid \$2,500 out of collected fines. Several communities have been looking to join together and hire a single hearing officer to serve several cities and towns.

### **Ticket Books**

The new ticketing procedure as established by MGL c.148A is now in effect. The Massachusetts Non-Criminal Fire Code Violation Notice ticket books have been printed and are available to all Massachusetts fire departments. Each fire department must fax a copy of the hearing officer appointment letter to indicate that their hearing officer is in place. The appointment letter along with the request for the ticket book should be sent to the attention of Rob Anderson. Please be sure to identify the name and address of the municipal fire official to whom the ticket book should be sent in the letter of request. The Department of Public Safety (DPS) is prepared to forward one ticket book per municipality and will provide additional information on how to receive additional ticket

books. Again, this information should be faxed to Rob Anderson at the Department of Public Safety (fax # 617-227-1754).

You may contact Bonnie Davis, Rob Anderson's assistant, at DPS if you have questions or need assistance regarding the new ticket books. She may be contacted by telephone at 617-727-3200 ext. 25236 or e-mail [Bonnie.Davis@state.ma.us](mailto:Bonnie.Davis@state.ma.us).

The Department of Fire Services sent two copies of the new pocket edition of the *Schedule of Assessments for Fire Code Violations*, one for the department and one for the community's designated hearing officer. For additional copies, please fax in a written request (fax # 978-567-3121) with the number of copies requested and the name and address as to where these should be sent.

### **Warnings and Fines: Tools to Gain Compliance**

The goal of every code compliance officer is to voluntarily gain compliance as quickly as possible. The public is best protected when code violations are corrected immediately or soon thereafter. Local fire and building officials still retain the ability to issue a warning for first offenses if the situation warrants. The fine for a first offense (subsequent to any warning issued) is \$100 per violation. If after 21 days the violation has not been satisfactorily corrected and no appeal has been made to the local hearing officer, the fire or building official may write another ticket for \$500 per previously cited offense. If after another 21 days, the violation remains uncorrected and no appeal has been made to the local hearing officer, the fine rises to \$1,000 per violation. ♦

health, housing, and other groups to educate concerned groups and the public on effective implementation of these regulations.”

### Implementation

The responsibility now falls on local fire departments to implement these regulations and DFS has put together resources to help.

Available from DFS (telephone, email, snail mail, webpage) are:

- A copy of the new regulation 527 CMR 31.00;
- Form FP-7C for inspections (not available on-line);
- A *Consumer's Guide to Massachusetts Requirements for CO Alarms* (tri-fold 1 page, 2-sided pamphlet);
- The DFS FireFactors on Carbon Monoxide Safety (1-page public education flyer);
- A customizable press release for use by local fire departments.

In addition, the code compliance and enforcement staff in the Office of the State Fire Marshal are prepared to assist local fire departments implement the regulation. Staff can be reached at (978) 567-3375.

### Training for Fire Departments

DFS put together and delivered a series of ten training seminars designed to answer questions on the new regulations. These trainings started February 27, 2006 and ran through March 13, 2006.

### Nicole's Law

On November 4, 2005, Governor Romney signed “Nicole's Law”, named after 7-year old Nicole Garofalo who died on January 28, 2005 when her Plymouth home was filled with deadly amounts of carbon monoxide on January 24. The furnace vents had been blocked by snow during a power outage.

### Provisions of New Regulations for CO Detectors

For buildings with fossil-fuel burning equipment or enclosed parking areas, the new regulations require carbon monoxide detectors on every level of the home and within ten feet

feet of a bathroom or kitchen.

All affected residences must install approved carbon monoxide alarms by March 31, 2006, although, where hard-wired systems are required by the BFPR, the deadline is January 1, 2007.

### Ideas on How to Spread the Word

- Tax or water bill inserts
- Press Releases
- Articles in local newsletters: parent newsletters, senior center newsletters
- Post on town webpage
- Distribute *Consumer Guide* in public places such as the senior center, town hall and other community buildings.
- Ask Health, Building and School Departments for help.
- Do interviews on local cable television or radio talk shows
- Place a notice on local cable access television
- Speak at Chamber of Commerce and community organizations such as Lion's or Rotary meetings

Fire Marshal Coan indicated that the board is continuing to develop additional CO alarm requirements for certain transient residential buildings such as hotels and motels, in addition to requirements for certain institutional buildings. It is anticipated that the regulations for these types of buildings will be promulgated in the very near future in order to meet the statutes' January 1, 2007 deadline.

### Alternative Compliance Options

This is the part of the regulation that has generated the most questions for fire departments. The first question fire prevention officers should ask owners of larger buildings is: “Is there a source of CO inside the individual apartments?” If the answer is “yes,” then this alternative is not an option.

of each sleeping area and in habitable basements and attics. The CO detectors may be:

- Battery operated with battery monitoring; or
- Plug-ins with battery back-up; or
- Hard-wired with battery backup; or
- Low voltage system; or
- Wireless, or
- Qualified combination smoke/carbon monoxide alarm.

Acceptable combination smoke detectors and carbon monoxide alarms must have simulated voice and tone features that clearly distinguish between the two types of emergencies. The State Building Code mandates that only photoelectric combination alarms are permitted within twenty

The regulation allows for alternative compliance options that may be more practical for larger buildings with multiple dwelling units that contain minimal or no sources of CO inside the individual units. The option allows owners to target the CO alarm protection only in those areas that could be potential sources of the CO. Examples include rooms that contain boilers, hot water heaters, central laundry areas and do not have an air exchange with any other room or common area, and enclosed parking areas. This CO protection option requires hard or low voltage wiring, monitoring and certain signal transmission requirements. The

# Public Education

## USFA Releases Fire and the Older Adult Report

In January 2006, the U.S. Fire Administration released a report *Fire and the Older Adult*. The term 'older adult' is what people over 65 liked to be called instead of "elderly" or "senior citizen." This short report has interesting demographic information about what is the largest growing segment of the population the fire service protects, fire risk factors for older adults, risk factors for fire in long-term care facilities, and risk factors in home health care or hospice care situations. It provides a good summary of the risk this target population faces of dying in a fire. The report states that adults age 65 and older are 2.5 times more likely

The report underscores how important it is to reach this vulnerable population.

The report, *Fire and the Older Adult*, was developed by the National Fire Data Center, part of the U.S. Fire Administration, and is based on research from a variety of public and private organizations and data from the National Fire Incident Reporting System (NFIRS), National Center for Health Statistics (NCHS), U.S. Census Bureau, the Federal Interagency Forum on Aging-Related Statistics, and the Department of Health and Human Services' Administration on Aging. The report analyzes the fire

risk to persons age 65 and older as a complement to the USFA's Fire Safety Campaign for People 50-Plus. The

report provides an extensive review of the fire situation for older adults in the United States and evaluates fire risk factors and risks of fire injury and fatality among that population group.

According to 2002 NFIRS data, 34 percent of the people who died in residential structure fires and 14 percent of the people who were injured were age 65 and older. In Massachusetts in 2004, older adults accounted for 28% of fire deaths and 12% of fire injuries.

### **A copy of the full report can be downloaded from:**

[www.usfa.fema.gov/downloads/pdf/publications/fa-300.pdf](http://www.usfa.fema.gov/downloads/pdf/publications/fa-300.pdf)

Information in this report can help fire officials, from chief to line officer, with strategic planning as they think about who their customers will be, what services they will require, and how to effectively deliver them. ♦

**Prevent Fire.  
Save Lives.**

A Fire Safety Campaign for People 50-Plus

to die in fires than the overall population, and as Americans age, their fire risk increases. In Massachusetts, people over 65 are twice as likely to be a fire victim according to 2004 Mass. Fire Incident Reporting System (MFIRS) data, down from 2.1 in 2003.

### **Act on this Information**

Massachusetts fire officials should consider downloading this report and sharing it with their local council on aging or senior center director. The Public Education Unit in the Office of the State Fire Marshal has been distributing a free copy of the National Fire Protection Association's *Remembering When: A Fall and Fire Prevention Program for Older Adults* to every fire department. [Contact [Jennifer.Mieth@state.ma.us](mailto:Jennifer.Mieth@state.ma.us) or 978/567-3381 if you have not gotten your copy yet.] This program will help fire educators or others teach eight fall and fire prevention behaviors to older adults in the community.



**She lost her home, too.**

It only takes seconds for a lifetime of memories to go up in flames. Unfortunately, as we grow older, our risk of dying in a home fire goes up dramatically. If you are age 50 or older, please pay special attention to fire safety. For your well-being and others you love.

- Don't smoke when you're sleepy—and really put that cigarette out.
- Test your smoke alarms monthly; change the batteries at least once a year.
- Keep heaters at least three feet from your bed, curtains, or other flammable materials.
- Develop and practice a fire escape plan.
- If at all possible, install home fire sprinklers.
- Never wear loose clothing when you're cooking.

**Prevent Fire.  
Save Lives.**



**FEMA**

To find out more about lowering your risk of fire death and injury, visit [www.usfa.fema.gov/50Plus](http://www.usfa.fema.gov/50Plus).

## Hazard Houses Regionally Located

The four Hazard Houses purchased by the Department of Fire Services are now regionally located for easier access by local fire educators.

Only trained fire educators can arrange to borrow one of these expensive teaching tools. The names of educators who have received the training are on a list at each location. Borrowers should contact the following people to schedule use of a Hazard House. You will be asked to sign for them.

**South:** Berkley Fire Department  
Chief Robert Milne  
(508) 828-1451  
[Bob.Milne@BerkleyFire.com](mailto:Bob.Milne@BerkleyFire.com)

**North:** Lowell Fire Department  
Insp. Rene Demers  
(978) 446-7260  
[RDemers@ci.lowell.ma.us](mailto:RDemers@ci.lowell.ma.us)

**Central:** DFS-Stow  
Jennifer Mieth  
(978) 567-3318  
[Jennifer.Mieth@state.ma.us](mailto:Jennifer.Mieth@state.ma.us)

**West:** DFS-Northampton  
Sally Wyrobek  
(413) 587-3181 X 200  
[Sally.Wyrobek@state.ma.us](mailto:Sally.Wyrobek@state.ma.us) ♦

## Free Resources for Fire Educators

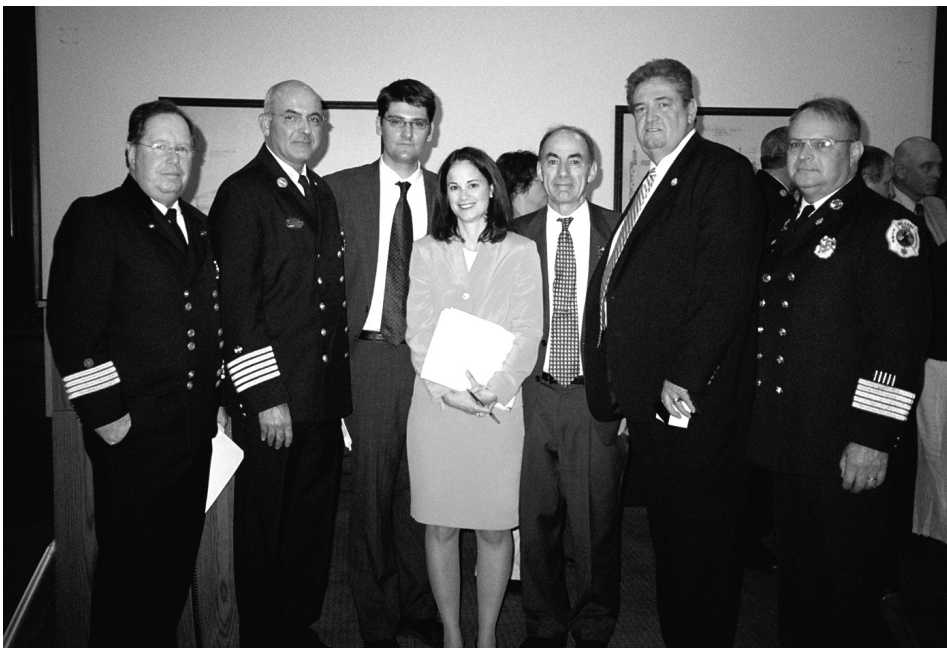
### Has Your Department Picked Up Yours Yet?

The Department of Fire Services has free copies of NFPA's *Remembering When: A Fall and Fire Prevention Program for Older Adults*, a set of the *Learn Not To Burn® (LNTB) Resources Books* and English and Spanish copies of the *LNTB Preschool Programs* for every fire department in Massachusetts. Check with our Public Education Unit at (978) 567-3381 or [Jennifer.Mieth@state.ma.us](mailto:Jennifer.Mieth@state.ma.us) if you think your department did pick yours up yet at the Public Education Conference last fall, or the S.A.F.E. In-Service in November. ♦

## "Fire Safe Cigarettes" Bill in Massachusetts Legislature

The Massachusetts legislature is considering "fire-safe cigarette" legislation, otherwise known as reduced ignition propensity cigarettes that self-extinguish if left unattended. The bill, co-sponsored by state Representative Rachel Kaprielian (Watertown) and state Senator Stephen Brewer (Barre), would adopt the same fire safety standards for cigarettes as New York, Vermont and California.

The bill was favorably reported from the Joint Public Safety Committee in October 2005 and is currently before the Joint Health Care Financing Committee to analyze the cost for the state to implement the standard.



(l-r) S. Coan, D. Lafond, E. Bouourassa, Rep. Kaprielian, R. DiPoli, R. McCarthy, S. Edwards

According to the Massachusetts Fire Incident Reporting System (MFIRS), cigarettes are the leading cause of fatal home fires and have been according to available records as far back as World War II.

At a hearing in May 2005, a coalition of fire officials and public safety advocates testified in favor of the bill. A January 2005 study by the Harvard School of Public Health found that New York cigarettes with the reduced ignition propensity technology were dramatically less likely to cause a fire if left to smolder than cigarettes without it. The cigarettes meet the fire safety standard by using less porous banded paper that acts like speed bumps to slow down and eventually extinguish if the smoker is not actively "puffing" on the cigarette. ♦

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**Editor's Note:** The bill passed the Senate in late March.

# Fire Investigation Unit

## Federal Sentences in Chelsea Arson for Hire Case

Over a 27-month period from April 2001 to July 2003, there was a string of arson fires and attempted arsons in a two-block area of Chelsea's downtown commercial district. The joint investigation determined that the owner of TL's Discount, which opened in March 2001, masterminded a series of arson and attempted arson fires to burn out his competition and to acquire a larger space.

In March 2001, Todd Lecesse opened a bargain goods store at 320 Broadway in Chelsea called TL's Discount. Four different commercial businesses within two blocks of this store suffered eleven actual or attempted fires over the next two years. All of these businesses sold furniture or jewelry or bargain goods and were competitors of TL's Discount.

The fires occurred at: Doug's Bargains at 420 Broadway; Doug's Bargains after it moved to 472 Broadway; Doug's Jewelry Store at 411 Broadway; New England Discount Center Furniture at 306 Broadway; and Slaton's Furniture Jewelry and Appliances at 286-294 Broadway. Slaton's had originally opened in Chelsea in 1939 and moved to the 288 Broadway site in 1941, and was still a profitable, going concern in 2003 when the fires occurred.

The first Slaton's fire occurred when someone poured an accelerant down a rooftop vent pipe on June 12, 2003. There was only minimal smoke and water damage. A week later someone drilled holes in the roof and poured in an accelerant and lit it. There was a small area of fire damage, a larger area of smoke damage and extensive water damage. The owner of Slaton's decided to retire rather than rebuild and he sold the building to Todd Lecesse, owner of TL's Discount. This was a

much larger space for Mr. Lecesse's business than where it was originally.

Investigators successfully used the Arson Watch Reward Program and a private reward offer to leverage information about the fires. Shawn Sandler, who ultimately plead guilty in federal court for setting the fire at Slaton's and Doug's Bargains, approached the owner of Doug's Bargains and the building's owner saying he had information on those fires.

The three co-defendants in this case are responsible for, and have admitted to ten arson fires and two attempted arson fires in the City of Chelsea. However they have plead guilty to fewer than the total number of fires for which they admit responsibility.

Todd Lecesse, of 7 Pine Tree Drive, Saugus, plead guilty on January 5, 2005 to orchestrating three separate fires in Chelsea: Slaton's Furniture, Jewelry and Appliances on June 19, 2003; and the June 12, 2001 fire at Doug's Jeweler's.

Shawn Sandler, of 182 Chestnut Street in Chelsea, plead guilty in federal court on January 17, 2006 to setting fires on June 19, 2003 at Slaton's Furniture and July 23, 2003 at Doug's Bargain Store. He will be sentenced on April 3, 2006 and if convicted faces 5-20 years in prison.

A third defendant, Jose Muniz, plead guilty in federal court on February 9, 2006 to four counts of arson and sentenced to 77 months in federal prison and three years supervised release and restitution. Muniz was charged in the April 4, 2001 fire at Doug's Bargains, the June 12, 2001 fire at Doug's Jewelers, the December 30, 2001 fire at Doug's Jewelers and the December 6, 2002 fire at Doug's Bargains second location.

Other fires that are part of this case occurred on December 21, 2000 on Eastern Avenue, January 8, 2003 at Doug's Bargains, June 2, 2003 fire at New England Furniture, and June 12, 2003 at Slaton's Furniture. The two attempted arsons took place on December 30, 2002 and July 18, 2003 at a multi-unit apartment building at 466 Broadway.

This series of fires was doggedly investigated by the Chelsea Fire Department, Chelsea Police Department, State Police assigned to the North Team in the Office of the State Fire Marshal, and the federal Bureau of Alcohol, Tobacco, Firearms and Explosives. The Major Crimes Unit in the U.S. Attorney's Office prosecuted the case. One of the challenges to sustaining long-term investigations is "keeping the team together." There are inevitable changes in investigative and supervisory personnel, and changes in civilian leadership through the normal political process. ♦



# MA Firefighting Academy

## Recruit Class #170 Graduates

State Fire Marshal Stephen D. Coan and Massachusetts Firefighting Academy Interim Director Richard Farrar are pleased to announce the graduation of the 170th Class of the Massachusetts Firefighting Academy's fifty-five day Recruit Firefighting Program on December, 23 2005. Coan said, "This rigorous professional training provides our newest firefighters with the basic skills to perform their jobs effectively and safely."

The Massachusetts Firefighting Academy, a division of the Department of Fire Services, offers this program, tuition-free.

### 69 Graduates From 36 Fire Departments

The sixty-nine graduates, repre-



Recruit Class #170

sent the thirty-six fire departments of: Attleboro, Barnstable, Belmont, Billerica, Centerville-Osterville-Marston Mills, Easton, Everett, Falmouth, Fitchburg, Framingham, Gloucester, Hopedale, Kingston, Leominster, Lexington, Lincoln, Lowell, Lynn, Lynnfield, Malden, Manchester, Mashpee, Newburyport, North Reading, Northampton, Orleans, Plainville, Raynham, Reading, Revere, Southborough, Southbridge, Wakefield, Westborough, Winchester and Woburn.

### Firefighter I-II Basic Training Class #9 and #10 Graduate

State Fire Marshal Stephen D. Coan and newly appointed Massachu-



Firefighter I-II Basic Training Class #10

setts Firefighting Academy Director Laurent R. McDonald planned to present certificates of completion to members of the Firefighter I / II Basic Training class #9 in a graduation ceremony on Sunday, February 12, 2006 at 2:00 p.m. Due to a blizzard, the graduation ceremony which

took place at Mount Holyoke College, South Hadley, was postponed until March 12, 2006.

The Firefighter I / II Basic Training program is unique in that it delivers

a standard recruit training curriculum, meeting national standards, on nights and weekends to accommodate the schedule of call/volunteer firefighters in suburban and rural areas. Bringing the training closer to the firefighters often means more firefighters can participate.

The twenty-nine graduates, twenty-six men and three women, represent the thirteen fire departments of: Amherst, Becket, Blandford, Bondsville, Chesterfield, Gill,

Goshen, Granby, Hadley, Monson, Russell, South Hadley Dist. 2 and Wales.

Class #10 graduated on Thursday, March 9, 2006 at the Chocksett Middle School in, Sterling, MA in 7:30 p.m. ceremony. The thirty-eight graduates represent the twenty-two fire departments of: Ashburnham, Berlin, Carlisle, Clinton, Harvard, Holden, Holliston, Hopedale, Hopkinton, Hubbardston, Lancaster, Lincoln, Lincoln, Millis, Northborough, Princeton, Rutland, Sherborn, Shrewsbury, Southborough, Sterling, and Townsend. ♦

## USFA Virtual Campus

The U.S. Fire Administration (USFA) in February began offering on-line training as part of its virtual campus. Simulations for command and control in a ranch house, a townhouse and a nursing home are available.

The Q324 *Ranch House* interactive simulation involves a scenario depicting a single-story, single-family dwelling and presents the student with a "room-and-contents" fire and basic rescue problems. Upon successful completion of this online simulation course, the user will be able to recognize the cues and problems associated with this type of incident. Course objectives are the rescue and safe removal of occupants. National Fire Academy/United States Fire Administration certification will be granted upon successful completion of the course evaluations.

The Q325 *Townhouse* simulation presents the user with a set of com-

*continued on page 8*

plex fire and rescue problems commonly found in a townhouse, row house, garden apartment, or condominium response. Upon successful completion of this online simulation course, the user will be able to recognize the fire and rescue issues related to this type of occupancy.

"This simulation is designed to help command officials better understand the problems they may encounter when responding to these kinds of occupancies," said Deputy United States Fire Administrator Charlie Dickinson. "This course will better prepare the firefighters and command officers facing the challenges present when dealing with these types of fires," he added.

Course objectives include safe removal of all occupants and contain-

ment and control of fire in the building of origin.

The *Q424 - Nursing Home Fire* simulation presents the user with a kitchen fire in a two-story nursing home. Upon successful completion of this online simulation course, the user will be able to recognize the rescue issues related to this type of occupancy - those people who have differing medical problems and those people who are visiting.

"This simulation, with its nursing home command challenges, is designed to help command officials better understand the problems that may occur within nursing facilities during emergencies," said Dickinson. "Homeland security and preparedness involves firefighters protecting all people living in all environments

in this nation. Our senior citizens are too often the tragic victims of fire. This course will better prepare the firefighters facing the challenges present when dealing with these types of fires."

These courses can be found on USFA's Virtual Campus at [www.training.fema.gov](http://www.training.fema.gov). The USFA has many other training programs, both online and classroom-based, that are designed to assist emergency responders in becoming better prepared for all types of emergencies. Information on these training programs and other USFA initiatives and publications can be found at [www.usfa.fema.gov](http://www.usfa.fema.gov). ♦

## Burn Building Renovations Heat Up

It's unusual not to smell smoke when entering the Department of Fire Services/MA Firefighting Academy's yard these days. Since the beginning of this year, instead of flames and black smoke pouring out of the burn building, there has only been some flying dust, debris-filled dumpsters and the shrill, grinding sound of power tools.

The renovation of the burn building officially began November 2005 when general contractor, C.J.M. Services, Inc. successfully bid on the project and was accepted by the Department of Capital Asset Management (DCAM). C.J.M. Services, Inc. is responsible for overseeing all the construction costs and schedules for the project, especially the removal of the interior concrete walls, or refrac-

tory, in preparation for the installation of a new thermal tiling system.

Because of the cost and extent of the burn building renovation project - a cost of more than \$1.5 million - DCAM is required by state law to manage the project. This management is taking place in partnership with:

DFS; C.J.M. Services, Inc., the general contractor; Studio One, Inc., the architect for the project; Elliot LeBoeuff & Associates (EL&A), structural engineers and special consultants on the thermal lining system; and High Temperature Linings (HTL), the Virginia-based company responsible for installing the thermal lining system. HTL has been installing live fire training structures throughout the USA, Canada, and Europe since

1993. The company's customers include state training academies for: Pennsylvania and Ohio; the cities of Los Angeles, California; Portland, Oregon; and Durham, North Carolina; and the counties of Fairfax, Virginia; Montgomery, Maryland; and Rockland, New York.

The burn building renovation project actually began in 1999, when a structural survey was performed on the burn building to determine any structural damage as well as damage to thermal linings and other non-structural systems. An additional survey of the burn building was again conducted in 2003. Both surveys have been conducted by EL&A in coordination with several other consultants, including Studio One, Inc.

The burn building, which opened in July 1991, is a four-story structure (three stories plus a basement) with



DFS Burn Building "renovation" (Feb., '06)

a total of 6,160 square feet of interior space (including stairs, excluding



Refractory removal-burn building interior

roof surfaces). Each floor has different dimensions, with the largest floor plan at the basement, and the smallest at the third floor. There are 18 burn rooms used for live fire training. *Typical* training evolutions in the burn building involve short duration of burns (less than two minutes) and 15-minute intervals at a minimum, between evolutions. A *typical* training day might involve five evolutions in the morning and two in the afternoon. Temperatures in the burn rooms can exceed 1,300 degrees F at the ceiling level.

The building is constructed of poured-in-place reinforced concrete, including all roof slabs, elevated floor slabs, interior stairs, walls, beams and columns. Concrete bearing walls support most of the elevated slabs. In a few locations, concrete beams supported either by concrete walls or concrete columns, support the elevated slabs. The basement floor is a slab-on-grade and is reinforced with welded fabric wire. There are steel exterior stairs attached to the front and rear of the building with concrete exterior stairs to the north and south of the building. (Source: *Report on the Structural Survey, Testing, and Evaluation of the Massachusetts Firefighting Academy in Stow, MA*, by Elliott LeBoeuf & Associates, Roger M. LeBoeuf, P.E., June 2, 2003).

Both structural studies basically concluded that the interior concrete, or refractory, has begun to chip away in certain locations due to over 11 years of heavy usage. Over the years, DFS staff has been successful in repairing and maintaining the refractory, and keeping the burn building safe for instructors and recruits. However, engineering studies recommended that the concrete walls need to be replaced and a better thermal system is needed to maintain a high safety level while maintaining high usage required by the agency.

With this background in mind, the structural engineers, EL&A, recommended several actions for improv-



HTL System 203-New thermal lining

ing the structure's exterior walls, roof, floors and stairs such as routing and sealing all cracks, as well as major demolition of the interior walls. EL&A recommended removing the existing concrete, or refractory, which includes welded wire mesh, anchor clips and nails, and installing a new thermal lining on the walls, specifically, High Temperature Linings (HTL) System 203. After DFS and Studio One conducting additional research into the HTL System 203, DCAM granted permission for the project to require the installation of this specialized system.

The HTL System 203 consists of "thermo refractory ceramic" tiles backed by one inch thick calcium silicate insulation boards. The tiles are made with calcium aluminate

refractory concrete mixed with metal fibers and other materials, distinguishing them from ceramic tiles. Each tile typically measures one-foot by one-foot by two-inches thick, with formed, ship lapped edges that allow an interlocking installation. Each tile is attached to the wall or ceiling with one expansion bolt at the center of the tile. The narrow gaps between the tiles are not sealed in order to allow for expansion during burns.

The advantages of using the HTL System 203 over the current refractory, or other available systems, is that it will not delaminate or debond (i.e. chipped or peeling refractory falling off) when exposed to live fire training, thus eliminating a safety hazard to firefighters. Also, this system can be exposed to longer, hotter training evolutions, such as evolutions where wood pallets are burned in addition to straw. The refractory would degrade at a faster rate when exposed to hotter, longer evolutions. Therefore, the HTL System 203 will provide a greater safety factor should the Firefighting Academy ever changes its training methods.

It is expected with all the suggested structural upgrades and the installation of the HTL System 203 that the burn building should have an operating life of 20 years or more. The anticipated completion date for the burn building renovation is May



HTL System 203-Installed tiles

2006, providing the weather cooperates and the exterior work may be completed in dry and warmer conditions. ♦

# Information Technology

## Disk Storage Guidelines

**C**an disks really last for the 100-year life span envisioned for them? Many users think the disks are indestructible, but they are wrong, said Fred Byers, an IT specialist at the National Institute of Standards and Technology (NIST).

The good news from NIST is that certain types of disks might last that long but only if handled with care.

But disk life expectancy depends on many factors, some controllable by users, others not, Byers noted.

Recordable CDs and DVDs can be as reliable as magnetic tape for backup, he said, and they read much faster because they use random access, whereas users must search files stored on tape sequentially.

The useful life span of disks varies with temperature, humidity and day-to-day use.

Data degradation at first can go unnoticed because of the error-correcting abilities of disk readers.

NIST has found that recordable disks seem to last much longer than rewritable disks, Byers said, and even longer than manufactured disks such as CDs for installing commercial software.

General industry guidelines now estimate office-burned copies of CDs and DVDs could remain readable for 100 to 200 years.

A disk burner records information by laser-heating a dye inside the disk. Over time the dye fades, rendering the information difficult to read. The disk's reflective layer, which sends information back to a photosensor during reading, is also subject to degradation. The reflective layer is

usually of thin gold, silver or silver alloy. Gold does not corrode, though gold-coated disks are expensive. Silver corrodes when exposed to air pollutants such as sulfur. Most silver-coated disks use alloys to inhibit corrosion.

Rewritable CDs and DVDs have a shorter life span of about 25 years, so Byers said he does not recommend them for archiving. A rewritable disk's metal-alloy data layer is less stable than that in write-once disks. And rewritable disks are affected by light, so they also have a limited number of reads—a number that's still uncertain.

Surprisingly, pre-manufactured CD-ROMs and DVD-ROMs may not last as long as recordable disks, Byers said.

Most industry estimates place the life span of professionally produced disks somewhere between 20 and 100 years. But the weakness of the ROM disks stems largely from their aluminum reflective layer, Byers said.

When exposed to humidity and atmospheric oxygen through scratches, cracks or delaminated areas in the label, the aluminum breaks down.

Byers warned that all the life spans are rough estimates. A hurried burn or a change in manufacturing technique could cause premature failure.

He advised agencies to consider the longevity of their current storage media and always be developing migration strategies to a new one.

"These days, the rate of change in technology is so much faster," Byers said, "I'm convinced there will be a

new storage technology within ten years."

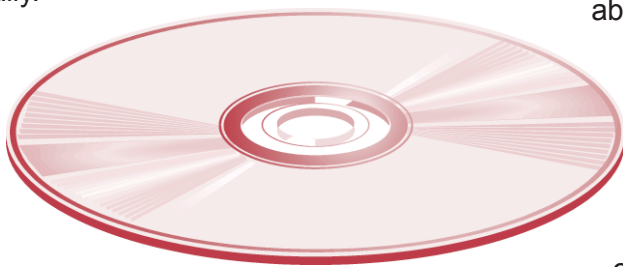
### ***The Real Culprit***

If you have purchased quality media from a quality manufacturer, you are still not assured of 50-100 years of data life!

You are in the greatest danger to the data longevity of your personal, family and business information that is stored on CD and DVD. Direct exposure to sunlight and intense heat can do dramatic damage. Rapid changes in temperature and humidity can stress the materials. Gravity can bend and stress the discs. Fingerprints and smudges can do more damage than scratches.

### ***Do's and Don'ts for Media Storage Do...***

- Handle discs by the outer edge or the center hole.
- Use a non solvent-based felt-tip permanent marker to mark the label side of the disc.
- Keep dirt or other foreign matter from the disc.
- Store discs upright (book style) in original jewel cases that are specified for CDs and DVDs.
- Return discs to their jewel cases immediately after use.
- Leave discs in their spindle or jewel case to minimize the effects of environmental changes.
- Remove the shrink-wrap only when you are ready to record data on the disc.
- Store in a cool, dry, dark environment in which the air is clean -- relative humidity should be in the range 20% - 50% (RH) and temperature should be in the range 4°C - 20°C.
- Remove dirt, foreign material, fingerprints, smudges, and liquids by wiping with a clean cotton fabric in a straight



*continued on page 11*

- line from the center of the disc toward the outer edge.
- Use de-ionized (best), distilled or soft tap water to clean your discs. For tough problems use diluted dish detergent or rubbing alcohol. Rinse and dry thoroughly with a lint-free cloth or photo lens tissue.
- Check the disc surface before recording.

### Do Not...

- Touch the surface of the disc.
- Bend the disc.
- Store discs horizontally for a long time (years).
- Open a recordable optical disc package if you are not ready to record.
- Expose discs to extreme heat or high humidity.
- Expose discs to extreme rapid temperature or humidity changes.
- Expose recordable discs to prolonged sunlight or other sources of UV light.
- Write or mark in the data area of the disc (area where the laser "reads").

- Clean in a circular direction around the disc.

### Reliable Medium

There is a lot of cheap CDR and DVDR media that has marginal quality. For some applications like games, quality isn't critical. For irreplaceable, vital data like family photos, special events, vacations and family/friends memories, quality does matter. If you are backing up mission critical data on your home or business computer, quality matters. Then it is important to select a brand of media that will keep your data safe, secure and available for years to come.

Quality and low prices just don't seem to mix!

The next step to long-term data reliability is to handle and store the media with the respect your data deserves.

If you have any questions please contact Steve Pheeny at (978) 567-3778. ♦



## The Department of Fire Services Web Site Will be in Transition

By Steve Pheeny & Ken Nyberg

**W**e are in the process of migrating the Department of Fire Services web pages to a new portalized website. One can find a link to DFS's new portalized landing page on the right hand side of DFS's home page. The purpose behind the transition is to join other Mass.Gov websites with a common look and feel. Web sites are becoming the information window to the world and standardization of access will encourage the growing population of web users to utilize more fully the vast amount of information that

is available on our own website and other state agency websites. While the migration is in process there will be links between the old and new websites until all of the information is available on the new Department of Fire Services portalized website. When you find the information located at a new URL it is best to create a "Favorite" or "Bookmark" in your web browser. If you are uncertain in how to create a "Favorite" or "Bookmark" please call the IT help desk at x3777 and as always we will be glad to help. ♦

## Fire Mobilization Strategic Plan

**D**FS, in conjunction with the FCAM Mobilization Committee and MEMA, is in the process of developing a strategic plan for Statewide Fire Mobilization to align their current mobilization procedures with the needs of modern Homeland Security parameters. The strategic plan will produce a set of recommendations, which the Mobilization Committee will evaluate for approval and implementation. It is intended to provide strategic direction for fire mobilization by developing 5-year goals and 10-year goals.

DFS has contracted with Municipal Resources Inc. and Public Safety Strategies Group to produce the report. The final report will be released by early summer 2006.

### Licensing Project

DFS-IT has submitted a proposal to convert its multiple licensing database applications into a single system called *My License*. This would be in partnership with the Commonwealth's Information Technology Division, which is implementing the statewide licensing software developed by System Automation.

*My License* will provide the end user with the ability to apply for licenses on-line and maintain their personal information. DFS will continue to conduct examinations of the applicants and to manage the license status information. There will be strong security features that will keep control of the data in the hands of DFS.

In a related but separate project, DFS is working with the State Police Fusion Center to provide its licensing data in a standard public safety format. This will provide licensing data to fire, police and other public safety personnel in remote locations, including fire stations and mobile computers on-scene. This would be a secure system not open to the general public. ♦

## Recalls

10/19/05 - #06-012 .....

### Candle Holders

Jack 'O Lantern Bucket Candle Holders

*Far East Brokers & Consultants, Inc.*

Only use 1 of the 8 candles that come with the decoration at a time otherwise it can generate too much heat & pose a fire hazard.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06012.html>

11/1/05 - 06-021 .....

### Candles

Pillar Candles With Jewels

*Pacific Trade International, Inc.*

The paint coating on the outside of the candle can ignite, posing a fire hazard.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06021.html>

11/9/05 - 06-024 .....

### Candles

Home Brand Tea Light Candles

*Target*

The candles can burn with a high flame & melt the plastic holders, posing a fire & burn hazard.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06024.html>

11/9/05 - 06-026 .....

### Candle Holders

Spooky Tree Tea-Light Holder

*Pottery Barn Outlet*

The candle holders can allow tea lights to have a high flame posing a fire & burn risk.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06026.html>

10/19/05 - 06-011 .....

### Gas Furnace & AC Units

Packaged Gas Furnace & AC Units

*International Comfort Products LLC*

The unit's control board can ignite, causing the ignition of flammable material adjacent to the unit.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06011.html>

10/27/05 - 06-018 .....

### Toy Ride-on Vehicles

Battery Powered Ride-on Vehicles

*Dorel Juvenile Group USA*

An electric malfunction can occur in the

circuit board &/or battery connector resulting in smoking & melting of components posing a fire & burn hazard.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06018.html>

11/8/05 - 06-023 .....

### Rechargeable Batteries

Nikon Rechargeable Battery Packs

*Nikon, Inc.*

The battery packs can short circuit, causing them to overheat & possibly melt, posing a burn hazard.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06023.html>

12/16/05 - 06-056 .....

### Computer Batteries

Dell Notebook Computer Batteries

*Dell Inc.*

The batteries can overheat posing a fire risk.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06056.html>

12/22/06 - 06-060 .....

### Batteries

Battery packs used with Polaroid portable DVD players

*Petters Consumer Brands LLC*

The battery can overheat & melt the plastic case while recharging, posing a fire & burn hazard.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06060.html>

2/17/06 - 06-092 .....

### Phone Batteries

Lithium Ion Batteries in SoundStation2W Wireless Conference Phone

*Polycom Inc.*

These batteries can overheat, posing a fire or burn hazard.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06092.html>

11/9/05 - 06-025 .....

### Air Purifiers

Perfect Air Ultra Air Purifiers

*Well Brain International Ltd.*

An overheating capacitor can cause arcing in a connecting wire that poses a fire risk.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06025.html>

11/10/05 - 06-023 .....

### Immersion Heaters

Immersion Heaters

*Chun Tai Electric Heater Company*

Moisture in the heating element could cause corrosion over time presenting a shock hazard.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06028.html>

11/17/05 - 06-031 .....

### Heating Element

Weller Brand Heating Element

*Cooper Hand Tools*

The housing of the heating element can unexpectedly leak hot metal, posing a serious risk of burn injury.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06031.html>

11/17/05 - 06-032 .....

### Vaporizer & Diffuser

Vapor-Eze Waterless Vaporizer & Vapor-Eze Aromatherapy Diffuser

*Juvenile Products Corp.*

A defective internal heater can cause sparking & emit flames while in use, posing a shock, burn & fire hazard.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06032.html>

11/22/05 - 06-037 .....

### Oscillating Fans

Oscillating Electric Tower Fan

*Haier America Trading LLC.*

Internal electrical arcing in the fan can cause a fire hazard.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06037.html>

12/1/05 - 06-044 .....

### Oil-filled Radiator

Maxi-Heat Electric Oil-Filled Radiator Heater

*King of Fans Inc.*

Welds in the heating fins can break allowing oil to leak posing a burn & fire hazard.

<http://www.cpsc.gov/cpscpub/prereel/prhtml06/06044.html>

*continued on page 13*

12/15/05 - 06-055.....

**Gas Ranges**

GE Monogram Professional Gas Ranges

*GE Consumer & Industrial*

A design flaw can cause an electrical arc between the wiring & adjacent gas supply tubes at two locations in the control housing posing a fire hazard.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06055.html>

12/20/06 - 06-057.....

**Gas Grills**

Aussie Gas Grills

*Meco Corp.*

The regulators can leak when the cylinder is connected & open & the grill is not in use posing a fire & burn risk.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06057.html>

12/20/06 - 06-059.....

**Christmas Tree Star**

Spinning Star Christmas Tree Topper

*Family Dollar Stores*

The tree topper can melt or smoke near the on/off switch posing a fire hazard.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06059.html>

1/5/06 - 06-061.....

**Metal Alcohol Burners***C & A Scientific Co. Inc.*

Alcohol can leak from defective soldering around the burner's copper tubing that acts as a wick, posing a fire & burn hazard.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06061.html>

1/11/06 - 06-064.....

**Fuel Hoses**

12" Braided Flex Fuel Hose

*Generac Power Systems Inc.*

The fuel hoses can leak if bent in an unreasonable fashion during the installation or upon completion of installation. If an ignition source is present, a fire or explosion can occur.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06064.html>

1/13/06 - 06-067.....

**Holiday Lights**

Mini Light &amp; Chasing Light Sets

*Target*

These lights have undersized & exposed wires, which pose a risk of electric shock &

fire hazards

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06067.html>

1/24/06 - 06-072.....

**Routers**

Porter-Cable 890 Series Routers

*Porter-Cable*

The motor coil insulation can be worn away by vibration from the motor, which could pose a shock hazard.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06072.html>

1/26/06 - 06-074.....

**Electric Smokers**

Bradley Electric Smokers

*Bradley Technologies Inc.*

In addition to the electric cord that plugs into the wall, these units have an electric cord with prongs on both ends that connect the generator to the smoker. If the unit is plugged into the wall socket & one end of the connecting cord is unplugged, there is an electric shock hazard.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06074.html>

1/26/06 - 06-075.....

**Oscillating Heaters**

Maxi-Heat Dream Tower Heater

*King of Fans Inc.*

The wires inside the oscillating heater can short circuit & spark, posing a fire risk.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06075.html>

2/1/06 - 06-080.....

**Propane Heaters**

40-80,000 BTU Portable Propane Convection Heaters

*DESA Heating Products*

The burners can "flashback", which is when fire burns inside the burner tube rather than out the other end. This can cause the lower portion of the burner tube to get hot enough to ignite combustible material underneath the heater.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06080.html>

2/7/06 - 06-082.....

**Sewing Machines**

Husqvarna Viking Designer I Sewing &amp; Embroidery Machines

*VSM Group AB & VSM Sewing Inc.*

Electrical arcing can occur in the machine's power supply, posing a fire risk.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06082.html>

2/7/06 - 06-084.....

**Fire Extinguishers**

Dry Chemical Fire Extinguishers

*Strike First Corp.*

The extinguishers can fail to discharge properly when the trigger is activated.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06084.html>

2/8/06 - 06-085.....

**Floor Fans**

Lasko, GE, Galaxy &amp; Air King Brand Box &amp; Pivoting Floor Fans

*Lasko Products Inc.*

An electrical failure in the motor can pose a fire hazard.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06085.html>

2/15/06 - 06-089.....

**Espresso Makers**

Orchestra Espresso Makers

*Krups*

The electrical connectors in the machine can erode, posing a fire hazard.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06089.html>

2/23/06 - 06-095.....

**Gas Grills**

Turbo Sport Portable Infrared LP Gas Grills

*Barbeques Galore, Inc.*

Faulty regulators can release too much gas to the burner causing an excessive burner flame, posing the risk of gas leaks, fire and explosions.

<http://www.cpsc.gov/cpscpub/prerel/prhtml06/06095.html> ♦



## Recalled Fire Extinguishers

In late February, the Office of the State Fire Marshal notified all companies licensed to service fire extinguishers about the following recall by the U.S. Consumer Product Safety Commission of portable fire extinguishers:

Manufacturer: **Strike First Corp.**, Scarborough, Ontario, Canada

**Model # ..... Serial # Range**

WBSF-ABC110AP ..... TC101566-TC108819

WBSF-ABC210AP ..... TC114969-TC135000

VV822001-VV832000 ..... WH161001-WH167622

WBSF-ABC340AP ..... TC135894-TC142345

These 2.5lb and 5lb dry chemical portable fire extinguishers have failed to discharge when the trigger was activated to expel the extinguishing agent. **These extinguishers shall not be serviced or sold to customers.** If you encounter these extinguishers, please notify Strike First Corp. to have the extinguishers repaired.

If you have any questions, please contact the Code Compliance & Enforcement Unit at (978) 567-3375. ♦

## CPSC Approves New Flammability Standard for Mattresses

*Federal standard could prevent 270 deaths each year*

WASHINGTON, D.C. – On February 16, 2006 the U.S. Consumer Product Safety Commission (CPSC) approved one of the most important safety standards ever developed – a new federal standard to reduce the severity of mattress fires.

When fully effective, CPSC estimates the new mandatory standard for mattresses is likely to save as many as 270 lives, preventing 78 percent of the deaths, and 1,330, or 84 percent of the injuries currently occurring every year.

“Consumers who purchase a new mattress that meets this standard will add an important layer of fire safety protection to their home,” said CPSC Chairman Hal Stratton. “Lives will be saved as a result of this standard, as it requires new mattresses to limit the spread and intensity of a mattress fire, which will give people more time to escape from their residence.”

The mandatory standard addresses mattress fires ignited by open flame sources, including matches, candles,

lighters, and other related scenarios. The test protocol was developed in coordination with the **National Institute of Standards and Technology** (NIST). “NIST’s contribution to CPSC’s development of this standard was invaluable,” said Stratton.

Under the new mandatory federal rule, mattress sets must meet a performance standard. The CPSC does not specify how manufacturers are to design their mattresses to meet the standard. The new federal standard for mattresses goes into effect on July 1, 2007.

In the performance standard, the peak heat release rate is limited to 200 kW during a 30 minute test. The total heat release is limited to 15 MJ within the first 10 minutes of the test.

Cigarette ignition is covered by a separate mandatory standard. That standard, 16 CFR Part 1632, has been in place for more than 30 years during which deaths and injuries from mattress fires caused by smoking materials have fallen dramatically. ♦

## New regs for CO alarms

*continued from page 3*

deadline for compliance with this method of protection is Jan. 1, 2007.

### **Landlords Must Inspect Annually and at Start of Each Rental Period**

Landlords must inspect, maintain, and replace, if necessary, required CO alarms annually and at the beginning of any rental period. Tenants should report any problems with detectors to the landlord immediately and learn to recognize the difference between the smoke detector and the carbon monoxide alarm.

### **Enforcement**

The Department of Public Health is required to adopt and enforce this

requirement on landlords as part of the State Sanitary code.

Fire departments are currently required to inspect smoke alarms when 1- to 5-unit homes are being sold and transferred. Starting March 31, 2006 (or January 1, 2007 where hard-wired are required) fire departments will be required to inspect all residences upon sale and transfer for carbon monoxide alarms. Maximum fees for joint inspection of CO alarms and smoke detectors are \$50 for single-family homes or units (i.e. condo), \$100 for 2-family dwellings, \$150 for 3-6 unit dwellings and \$500 for 6 or more unit buildings.

### **State Plumbing Code and Side-walled Gas Furnaces**

The CO alarm requirements for certain side-walled gas-fueled equipment installations (see 248 C.M.R. 5.08), required by the State Plumbing Code, remain in full effect and are not affected at this time by the passage of Nicole’s Law. This CO requirement is to be enforced by the local plumbing/gas inspector. For more information, see the Fire Marshal’s Advisory **Revised Emergency Gas Code Regulation**, previously sent to fire departments and posted on our website. ♦

# Code Compliance & Enforcement

## New USFA "Coffee Break Training" Opportunity

Charlie Dickinson - Posted on December 13, 2005

The staff of the United States Fire Administration (USFA) understands clearly that fire and building inspectors with busy daily schedules often don't have time to attend valuable skill-enhancing training sessions, so USFA is doing something about it.

USFA has begun posting weekly "Coffee Break Training" bulletins on our Web site at [www.usfa.fema.gov/training/nfa/coffee-break/](http://www.usfa.fema.gov/training/nfa/coffee-break/).

These short, one-page training notices provide technical training in fire protection systems, building construction, codes and standards, inspection techniques, hazardous materials and administrative tips.

Each notice includes a photograph or drawing that illustrates the point of

the training lesson. The first two *Coffee Break Training* notices recently posted covered correct smoke alarm placement and maintaining minimum aisle widths in mercantile occupancies. **Note:** *These are based on National Model Codes; Massachusetts requirements may differ.* Future bulletins will include topics such as details for fire pump installations, liquefied petroleum gas storage regulations, stand-pipe and sprinkler systems and storage of lightweight roof trusses on job sites.

USFA also will send out quarterly self-assessment examinations related to the training notices so those who get the e-mail training can evaluate their own retention and learning. ♦

**“ USFA has begun posting weekly bulletins online! ”**

## Changes to MGL C148

Chapter 123 of the Acts of 2005 (Nicole's Law) created a mandatory requirement for the installation of CO alarms in all residential buildings and structures containing fossil fuel burning equipment or enclosed parking.

Two other sections of c. 123 amended c.148 in two specific areas:

c.148 s.26E (Smoke Detector Law) has been amended to eliminate the local option provision for 1- and 2-family homes. As of Feb. 4, 2006, all single, 2-family, and 3-5 family homes are subject to the smoke detector requirements of s.26E upon sale or transfer of the property.

c.148 s.27A (Disabling of Alarm Systems) has been amended to include carbon monoxide alarms within the scope of systems that are prohibited from being disconnected or shut off without prior approval from the head of the fire department. This change became effective on Feb. 4, 2006.

If you have any questions regarding these changes, please contact the Code Compliance & Enforcement Unit at 978-567-3375 or the Western Massachusetts office at 413-587-3181. ♦

## Western Massachusetts DFS Liaisons

Retired Chief Alfred Morrisette and Chief Michael A. Morrissey are the DFS liaisons to the county and regional chiefs organizations as well as to the heads of fire departments in Berkshire, Hampden, Hampshire, and Franklin counties.

Chiefs Morrissey and Morrisette attend each of the monthly county chiefs meetings to bring forward any new information from the Department of Fire Services with special emphasis on the fire training system. In addition, they serve as the DFS Liaison to the Homeland Security Regional Councils. Chief Morrisette is retired from the Easthampton Fire Department and Chief Morrissey is the Russell Fire Chief and serves on the Westover Air Force Base Fire Department. They can be contacted at the DFS Western Massachusetts office at:

**Department of Fire Services**  
Western Office  
P.O. Box 389 - One Prince St.  
Northampton, MA 01060-0389  
(413) 587-3181,  
extension 204 ♦



## Permits Required by the Fire Code (527 CMR)

Fire chiefs and fire prevention officers are required to enforce the state's fire code that covers a huge range of fire and explosion issues from blasting to underground storage tanks, from oil burners to sprinkler systems. The head of the fire department or his designee shall have the authority to issue the following permit types, as described in 527 CMR and M.G.L. c. 148.

Permit Type	Form	Reference
Blasting	FP-6	527 CMR 13.04(2), 13.04(11)
Bonfires and Burning Christmas Trees	FP-6	527 CMR 10.23
Bowling Pin and Lane Refinishing	FP-6	527 CMR 10.15
Cannon and Mortar Firing	FP-6	527 CMR 22.03
Carbon Monoxide	FP-7C	527 CMR 31:00, M.G.L. 148, §26F1/2
Cellulose Nitrate Film	FP-6	527 CMR 10.27
Combustible Fibers	FP-6	527 CMR 28.03
Compressed Natural Gas (CNG)	FP-6	527 CMR 26.08
Covered Mall Buildings	FP-6	527 CMR 10.26
Crop Ripening or Color Processing	FP-6	527 CMR 35.03
Cutting and Welding	FP-6	527 CMR 39.04
Dust Explosion Prevention	FP-6	527 CMR 10.16
Explosives and Black Powder	FP-6	527 CMR 13.04
Fire Protection Equipment	FP-6	527 CMR 10.03(15); M.G.L. c. 148 §27A
Fire Protection System	FP-6	527 CMR 10.03(15)
Fireworks, Display	FP-6	527 CMR 2.05; M.G.L. c. 148, §39A
Fireworks, Manufacture, Storage and Handling	FP-6	527 CMR 2.03; M.G.L. c. 148, §12
Flammable and Combustible Liquids	FP-6	527 CMR 14.03, 15.04; M.G.L. c. 148, §23
Flammable Gases and Solids	FP-6	527 CMR 14.03
Fuel Transfer Operations	FP-6	527 CMR 5.08
Fumigation and Insecticidal Fogging	FP-6	527 CMR 10.06
Hazardous Substances, Left Unattended	FP-6	527 CMR 25.08
Limited Special Effects	FP-6	527 CMR 2.09
LP-Gas	FP-6	527 CMR 6.08
Matches	FP-6	527 CMR 10.18
Oil Burning Equipment	Form 1	527 CMR 4.03
Open Air Fires	FP-6	527 CMR 10.22
Ovens and Furnaces	FP-6	527 CMR 10.19
Rubbish Containers	FP-6	527 CMR 34.03
Salamanders	FP-6	527 CMR 20.01
Smoke Alarms	FP-7	MGL c. 148, §26F
Special Seasonal Decorations	FP-6	527 CMR 21.02
Storage, Combustible Material	FP-6	527 CMR 10.03
Tank Vehicles Parked Overnight	FP-6	527 CMR 8.04, 14.03
Tanks and Containers	FP-44	527 CMR 9.06, 9.07; M.G.L. c. 148, §38A
Tar Kettles on Roofs	FP-6	527 CMR 10.03
Tire Recapping and Rebuilding Plants	FP-6	527 CMR 10.21
Tire Storage	FP-6	527 CMR 10.03
Torches and Heat Producing Devices	FP-6	527 CMR 10.24
Transportation of Combustible Liquids	FP-6	527 CMR 8.04

## Hazmat Evolution to Meet the Threats of a New Era: Part 3, Pandora's Box

Ancient mythology tells of a woman named Pandora who was asked to watch, but not open a box carried by a messenger from Jupiter. Overcome by curiosity, she opened the box. "Jupiter had malignantly crammed into this box all the diseases, sorrows, vices, and crimes that afflict poor humanity; and the box was no sooner opened, than all these ills flew out, in the guise of horrid little brown-winged creatures, closely resembling moths. These little insects fluttered about, alighting, some upon Epimetheus, who had just entered, and some upon Pandora, pricking and stinging them most unmercifully. They then flew out through the open door and windows, and fastened upon the merry-makers outside, whose shouts of joy were soon changed into wails of pain and anguish." (Ancient Greek Legend)

The October 2001 delivery of five envelopes containing anthrax, immediately upon the heels of the terrorist attacks of September 11, opened the Pandora's box of domestic biological weapons. Combined with the easy ability of ill-meaning people to convey recipes for biological weapons through books and the Internet, biological agents used as weapons will likely pose a continued risk for the distant future.

While chemical and radiological threats have now faced the fire service and hazardous materials (hazmat) response teams for some time, biological threats pose vast new challenges. To a large degree, a truly successful use of biological weapons would not become an immediate concern of the fire service. It would likely come as a covert dispersal and would present, first, in the hospitals and doctors' offices of the affected areas. In contrast, overt releases of alleged biological agents

place fire departments and hazmat teams in the difficult position, with very limited ability, to determine real events from hoaxes. Though some would argue that such early determination is unnecessary and not the role of the fire service, the public demands it. Real-time "tactical" decisions must be made to prevent risk or unnecessary adverse impact. This article describes the issues surrounding biological agents and progress toward decision-making.

The Hazardous Materials Response Teams of Massachusetts were not unprepared when anthrax appeared



as a true and immediate threat in October of 2001. In response to several high visibility hoaxes that had occurred throughout the country, work completed by the division in the mid 1990s had resulted in a consensus response plan between the DFS Hazmat Division, the Boston office of the Federal Bureau of Investigations (FBI) and the Massachusetts Department of Public Health (DPH). The State Fire Marshal issued the essence of this response plan in 1999 as an advisory to all fire departments. In 2000, joint tabletop exercises were conducted at six Massachusetts locations by DFS and DPH that utilized this response scenario and a pandemic disease scenario.

However, the sudden and vast onset of requests for fire department

responses /hazmat team responses to suspicious mail and substances experienced in 2001 did not fit the paradigm of the original plan. The plan had to be adjusted to meet the logistical needs of what equated to a 21,000% increase in hazmat responses for a three-week period. Over time, the volume of responses for suspicious items has diminished, but the nature of these incidents has become less specific as new threats and suppositions of methods of biological agent dissemination have emerged. Today, incidents creating suspicion can come from anywhere and involve materials in any form. The classic "white powder in an envelope" is but one of a myriad of situations to which the concerned public is summoning fire departments. We have also learned that true threats of biological weapons do not come only from international terrorists. Actual cases of the attempted use of biological agents have been carried out by home grown criminals, even here in Massachusetts. What remains clear is that the risk of biological agents is, and will remain, a continued threat that we must effectively manage.

Considerable time and effort has been devoted at the state and federal level to managing the risk of biological agent releases. Public Health Laboratories, the Centers for Disease Control (CDC) and FBI have been highly reluctant to accept field-testing technology by emergency services. In part, this reluctance has been based upon the limits of reliability of field-testing and, in part, because of multiple incidents where field-testing has been misused or miss-communicated with bad results.

Biological field-testing can be described in three categories: basic

*continued on page 18*

protein detection, lateral flow (or handheld) assay, and polymerase chain reaction (PCR) which is DNA testing. The most common commercial systems utilize a lateral flow assay and function similar to pregnancy tests, looking for specific antigen- antibody reactions. Concerns about these technologies have been based largely in the sensitivity, how much is needed to be present to be detected, and the chances of false positive or false negative results.

Over the past five years, multiple “breaking news” reports have flashed across our television screen reporting “positive” tests for one biological agent or another. Often, these reports have been caused by inaccurate field testing and improper release of information. This leads to the other source of concern, “what to do with the information.”

Despite these issues, it has been a priority of the Department of Homeland Security (DHS) to enable the early detection of a biological agent release. To resolve the problems of field-testing, DHS contracted with the Association of Analytical Chemists (AOAC) to develop approved methods for testing and certification of equipment and with the American Society for the Testing of Materials (ASTM) to develop sampling method standards. This project also included the development of an expert panel from the various federal agencies and a “users group” comprised of major response organizations from around the country. The Department of Fire Services, Hazmat Division serves as a member of this users group. This effort has, as its combined objective, the development of approved processes for the field-testing of biological agents and standard methods of sample collection. A substantial portion of this effort has been completed.

In Massachusetts, a meeting was held on February 10, 2006 between key public health and public safety

technical staff and policy makers. At this meeting it was agreed that sufficient progress has been made and sufficient need exists for tactical decision-making support, that steps should be taken to advance the implementation of field-testing of biological agents by hazardous materials teams. This effort is now moving forward.

### **Screening Versus Testing**

Since 2001, the CDC and the FBI have strongly recommended or “required” that suspicious samples be pre-screened before being sent to laboratories of the “Laboratory Response Network” (LRN). Pre-screening is conducted to protect the lab from possible damage by chemical weapons, radiation or explosives. This is the basis and reason for current testing conducted by Hazardous Materials Response Teams. Oddly enough, any benefit achieved by the resultant identification of materials and elimination of threat possibilities at the scene must be viewed as secondary and inconclusive.

Prescreening does not have, as its objective, the identification of the suspicious substance. According to the FBI, all substances must continue to be viewed as a biological threat until a LRN laboratory has conducted confirmatory tests. In fact, in all cases of a highly suspicious nature, this requirement is strictly adhered to.

Suspicious substances submitted to the lab are first screened by the hazmat team for radiation using one of several instruments carried. The presence of radiation is determined only when there is a level substantially above background. Next, Fournier Transfer Infrared (FTIR) Spectroscopy is used to detect hazardous chemicals and explosives. It is important to understand that the FTIR cannot identify everything. FTIR will only produce spectra for substances that have a covalent

bond, those that share an ion. Substances such as salts, pure elements and substances with a pH higher than 12 (strong alkaline) cannot be seen. Additionally, a substance must be in the library of the unit to be identified and mixed substances can be challenging to identify and require additional skills and expertise. The FTIR currently has a library of 16,000 substances. This summer, an additional 25,000 substances will be added to the library.

The addition of these substances will aid in screening and in the chemical identification, but do not change the primary purpose of its use in screening of potential biological agents. Those specific substances (explosives and chemical warfare agents) that the device screens against for laboratory submission are already in the unit. Once screened, samples are submitted for biological analysis to the state DPH laboratory.

### **Threat Levels**

Current DPH recommendations divide suspicious substances into three categories: no apparent risk, low risk and high risk. No apparent risk events are those instances where, through investigation at the scene, the substance can be determined to be associated with normal activity. Examples might be the white powder found on many items of bulk mail, which is a corn starch substance used to keep magazine pages from sticking together when stacked on pallets. Another example would be white powder in a police cruiser, assured to be powdered sugar from a doughnut (just kidding). The MA Public Health laboratory does not recommend testing substances that fall in this category and suggests that first responders dispose of these items in the trash rather than send them to the laboratory.

Low risk incidents are those where

## Hazardous Materials Teams to Employ Nano Technology for Chemical Control

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**T**he Department of Fire Services, Regional Hazardous Materials Teams are now armed with reactive nano technology to aid in the neutralization of extremely hazardous materials. Nanoscale “FAST-ACT” chemical absorbent/neutralizer in three sizes of application; a “shaker” bottle for small areas, 5 lb. pressurized cylinder for larger releases and a 20 lb. pressurized unit with fogger attachment for large areas or aerosolized vapors. The pressurized units are essentially fire extinguishers painted white.

Hazmat teams are issued this product to “neutralize, contain or destroy a wide range of toxic chemicals and chemical warfare agents in situations where immediate action is required

to save lives, limit extension of a release, or to protect the responder.” FAST-ACT is not intended to be used to perform clean-up functions.

The FAST-ACT family of products was designed to offer protection against that “once in a lifetime” response to a chemical warfare agent, while at the same time offering a single highly effective solution to deal with more common release such as hydrofluoric acid or pesticides. FAST-ACT enables the use of a single product to mitigate threats posed by highly toxic chemicals in either liquid or vapor form.

### **Features and Benefits**

FAST-ACT is effective against a wide range of toxic chemicals in-

cluding: chemical warfare agents, acids, halogenated compounds, phosphorus compound, acidic and caustic gases, organic compounds. It neutralizes both liquid and vapor hazards with rapid neutralization upon contact.

The addition of this advanced chemical mitigation technology is part of the department’s ongoing commitment to provide greater safety to hazmat technicians, fire fighters and the public and to provide incident commanders with the best available capabilities to overcome complex chemical emergencies. ♦

### **HazMat Evolution Part 3**

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*continued from page 18*

no such association can be made. A substance is found in a location with no obvious explanation, but no threat or other threat indicators are present. These substances should be collected under existing protocols for laboratory testing, but will not necessarily be immediately tested.

High-risk events are those incidents where an overt threat, written or verbal is made or where combinations of factors lead to an elevated concern. Such factors may include similarity to other incidents either in state or nationally, an event at a “high target value” location or the presence of dissemination devices. A high-risk determination can be aided with assistance from the WMD Coordinator of the Boston FBI office. In this role, the FBI serves more as a resource to the fire service and hazmat teams than it does as a law enforcement agency. These circumstances substantially change the character of the response, generally bringing a number of federal and state law enforcement agencies to the scene and will generate more

active communication between the scene and the DPH laboratory.

Careful and coordinated communication between agencies is essential in high-risk incidents. The media quickly picks up misstatements about the level of threat and can cause undo public concern.

### **Field Testing, Immediate Future Direction**

In accordance with the agreement between DPH and DFS, program development is ongoing to enable the limited testing of suspected biological agents. Biological field-testing will occur only in high threat level incidents and merely for the purposes of tactical decision making, which would occur with concurrent DPH consultation. Under no circumstance should the results of field-testing ever be released or termed “positive” in on-scene communications. This capability is not expected to be available until late summer or fall of this year.

Tactical decision-making are those actions that will be taken by the

incident commander and in consultation with local health officials relative to public access to an effected area and defining that area, pending laboratory results. Such decisions may include keeping emergency services and hazmat teams, on scene until the lab communicates results.

### **The Future**

Biological threats will remain part of the ever-growing spectra of emergencies facing the fire service. Science, policy development and experience will aid in refining and improving our ability to manage these threats. It is unlikely that a time will ever come when technology will allow definitive determination of a biological threat at the scene of an emergency. However, the partnerships now in place provide local incident commanders with an impressive and coordinated support system in intelligence and scientific testing capability, giving every community greater ability to assure the safety of the public. ♦

## MFIRS Assistance & Electronic Reporting

The Office of the State Fire Marshal needs to close the 2005 database by May 1 to begin analysis of the data as quickly as possible in 2006.

Please contact Derryl Dion, Research Analyst at (978) 567-3382 or [Derryl.Dion@state.ma.us](mailto:Derryl.Dion@state.ma.us) with any questions regarding MFIRS or to conduct fire data or histories research. The email address to send your electronic MFIRS reports to is: [MFIRS.Report@state.ma.us](mailto:MFIRS.Report@state.ma.us). One or two days after your first submission via email please call Derryl Dion at (978) 567-3382

to confirm its receipt. If you are reporting electronically please send us your reports on a monthly basis during the first two weeks of the following month.

***“The Office of the State Fire Marshal needs to close the 2005 database by May 1 to begin analysis of the data as quickly as possible in 2006.”***

### Training

If you feel your department needs more training on MFIRS v5 and can guarantee 15 students, please contact Derryl Dion to set up an MFIRS v5 class. It is a 4-hour MFA class and now comes with 4 OEMS credits. Enrollment must be open to other departments.

### Upcoming MFIRS Classes

Tuesday, 5/2/06 @ MFA in Stow, MA from 09:00 – 13:00. Course # 200000613 Session B.

### \*NEW\* NFIRS Data Analysis & Problem-Solving Techniques Class

Tuesday & Wednesday (5/9/ - 5/10/06) @ MFA in Stow, MA from 09:00 – 1600. Course # 200155S41 Session A. You will need to complete the FEMA General Admission Application Short Form 75-5A and send it to the MFA Registrar. This class will be delivered by National Fire Academy instructors. It is designed for experienced NFIRS/MFIRS users

who need enhanced fire incident analysis and reporting skills. Knowledge and experience with both MFIRS and Excel will be extremely helpful.

### 2005 MFIRS Year End & Quality Control Reports

During March 2006, the Fire Data Unit sent out 2005 MFIRS Year End and Quality Control Reports to each fire department that submitted 2005 data. If you have not submitted any or all of your 2005 incidents, please do so as soon as possible. If you did not have

any reportable fires, please have your chief, sign and date the Certificate of No Reportable Fires sent in the absence of any quality control reports.

The statistical feedback reports include *2005 Incident Submission by Month* and *2005 Fires & Arson Fires by Incident Type*.

The quality control reports include:

- *2005 Incidents Returned to Department Corrected Forms Not Received by DFS,*
- *2005 Incidents Missing the Arson/Juvenile Firesetters Module.*
- *2005 Error Validation Report, 2005 Fires Under Investigation,*
- *2005 Structure Fires With Incorrect or No Property Use,*
- *Electrical Fires with No Equipment Involved,*
- *2005 Civilian Fire Casualty Modules with Missing Data for Any Fields,*
- *2005 Fire Service Casualty Modules with Missing Data for Any Fields.*

### Arson and Juvenile-Set Modules Mandatory in Massachusetts

In Massachusetts if a fire is considered to be arson (intentionally set), it is mandatory that the arson portion of

the Arson/Juvenile Firesetter Module be completed. For those of you using MFIRS software, most companies do not make it a mandatory requirement, but it still must be completed. If the person involved in starting the fire is under the age of 18, the age must be entered into section E3 (Human Factors) of the Fire Module and the Juvenile Firesetter section of the Arson Module must be completed.

### Definition of Arson

In NFIRS, a fire is considered arson if the Cause of Ignition (Fire Module) = 1 (Intentional) and the Age of Person (Fire Module) is greater than 17 or if the field is blank; or if the Wildland Module is used (in place of the Fire Module), the Wildland Fire Cause = 7 (Incendiary) and the Age of the Person (Wildland Module) is greater than 17 or if the field is left blank.

### Fatal or Large Loss Fires

If you have a fire or explosion with a **fatality or large loss (>\$1,000,000)**, please forward a paper copy of the MFIRS report with a completed Remarks section to Derryl Dion within 2 business days. The report should include the Basic, Fire, Civilian Fire &/or Fire Service Casualty Module(s), and Structure Fire Module (needed for all structure fires). This most likely will be a preliminary report and you can file the complete report at a later date unless otherwise noted. Every effort should be taken to make sure that these reports are as complete as they can be given all of the information available at the end of your investigation. If one of the state troopers from OSFM's Fire Investigation Unit (FIU) was involved with the investigation, please contact them periodically to see what they are reporting as their conclusions in their report. FIU reports are separate from your MFIRS reports, and using the team concept both reports should reflect the same conclusions.

# MFIRS V5 Coding

## Civilian Fire Casualty & Fire Service Casualty Modules

In MA all fields in the Civilian Fire Casualty and Fire Service Casualty Modules must be completed. If you are using third party software, your software may not require that some of these fields be completed because they are adhering to the USFA's NFIRS federal specifications. Unfortunately if these fields are not mandatory, many are not completed and valuable data is left off and lost. Since the preservation of life is the number one priority of the fire service, we feel the need to collect all of the obtainable information. The information contained on these modules is confidential and not public information and fire chiefs are exempt from HIPPA regulations in obtaining it for (pre-existing) reporting requirements.

## Wildland Fires

Please remember that even if you are using third party software you have the option of using the Fire Module instead of the Wildland Module. The Wildland Module is an **optional** module that may be used for any of the following Incident Types: 140-143, 160, 170-173, 561, 631 and 632. If your software program does not allow this option, please contact your vendor and remind them.

In MA we strongly recommend that you use the Fire Module for these types of fires.

## Permit Fires and Unauthorized Burning

If you respond to a permit fire that you have to extinguish, code it as an Incident Type = 631: Authorized controlled fire or 632: Prescribed fire. If the fire expands beyond the focus of the permit, then use an Incident Type = 140-143.

- Do not use Cause of Ignition = 1: Intentional, which is reserved for arsons.
- Use either Cause of Ignition = 2: Unintentional or 4: Act of Nature depending on the reason

the fire got out of control.

If you respond to an illegal burning use Incident Type = 561: Unauthorized burning.

## Mulch Fires

Mulch fires should be coded as Incident Type = 140: Natural vegetation fire, other.

## Incident Type 100 Not Allowed

Do not code any fires as Incident Type = 100: Fire, other, unless it does not fit into any of the other incident types between 111 and 173.

## Outside Rubbish Fires

If you have an **outside** rubbish fire, it should be coded as an Incident Type = 150-155. Do not use Incident Type = 118: Confined trash or rubbish fire **inside of a structure**.

## Carbon Monoxide

With the implementation of Nicole's Law and the accompanying BFPD regulations, it is expected that the number of Carbon Monoxide (CO) incidents will increase dramatically. Although fire departments are not mandated to report these incidents to MFIRS, we strongly encourage fire departments to do so voluntarily. The data will be very useful. Many fire departments are already reporting these serious incidents and we thank them for their diligence in helping track this potentially life-threatening problem.

In MFIRS there are three different Incident Type codes for CO incidents.

Incident Type 424 – CO incident. Excludes incidents with nothing found (IT = 736, 746).

Incident Type 736 – CO detector activation due to malfunction.

Incident Type 746 – CO detector activation (no CO found).

When finishing the Basic Module, be sure to complete the **Detector** field to record whether the CO detector alerted the occupants. ♦

# American Heart Association's New CPR Guidelines

By Gerald M. Dworkin,  
Aquatics Safety & Water Rescue

LIFESAVING RESOURCES INC.  
[www.lifesaving.com](http://www.lifesaving.com)

The American Heart Association's (AHA) new guidelines for CPR and emergency cardiovascular care, released late last year, include several major changes of which EMS providers and lifeguards should be aware.

The first involves an increased emphasis on proper chest compressions. CPR recipients (excepting newborns) should receive about 100 chest compressions per minute, allowing full chest wall recoil in between. Interruptions in chest compressions should, to the extent possible, be limited.

Single rescuers should use a compression-to-ventilation ratio of 30:2 for all victims except newborns, instead of the traditional 15:2 rate for adults and 5:1 for infants and children. Rescue breaths should be given over one second and produce visible chest rise. Rescuers are warned against delivering too many breaths.

When attempting defibrillation, rescuers should deliver one shock, then follow that with immediate CPR. Previously, rescuers were to deliver up to three shocks, checking the heart rhythm before and after. Rhythms should now be checked after about five cycles (or two minutes worth) of CPR.

See [www.americanheart.org](http://www.americanheart.org) ♦

# Licensing Exams

## Licenses

The Office of the State Fire Marshal issues licenses to people and companies engaged in fireworks, blasting, explosives, cannon and mortar firing, special effects, special hazard systems and portable fire extinguishers. Information on applications and exam dates to obtain new licenses

or to renew existing licenses may be obtained by calling (978) 567-3700. Examinations for licenses are held quarterly. Filing deadlines, exam locations, dates and times can be found online at: [http://www.mass.gov/dfs/osfm/license\\_exams.htm](http://www.mass.gov/dfs/osfm/license_exams.htm). ♦

All licensing exams will be given at the Department of Fire Services, Stow campus, starting at 9 a.m. Arrangements may be made to take the scheduled exams on the same dates, at the same times at the western Massachusetts office of the Department of Fire Services, One Prince Street, Northampton.

## 2006 Exam Schedule

Examination	Deadline Date	Examination Date	Location
Fireworks	May 8 (Monday)	May 16 (Tuesday)	Classroom 109
Special Effects	August 7 (Monday)	August 16 (Wednesday)	
Blasting	November 6 (Monday)	November 16 (Thursday)	
Blasting R&D			
Fire Extinguishers	April 10 (Monday)	April 20 (Thursday)	DFS Stow Auditorium
	July 17 (Monday)	July 26 (Wednesday)	
	October 9 (Monday)	October 19 (Thursday)	

## Status Report of Compliance/Enforcement Actions

The following is a status report of recent compliance and enforcement actions taken by the Office of the State Fire Marshal against individuals or companies for violations of MGL Chap. 148 and 527 CMR. The status of the action is provided and notation is made regarding the effective date of the action. While other

actions may be pending, only those individuals or companies who have had administrative hearings with decisions rendered will be documented in this space.

Should there be any question regarding the status of any license or certificate, please call the Office of

the State Fire Marshal at any time for verification. The Code Compliance and Enforcement Unit or Technical Services can be reached at either (978) 567-3300 or in western Mass. (413) 587-3181. ♦

### Compliance/Enforcement Actions By The Department of Fire Services

Name	Company	Action Taken	Terms	Ends
<b>Blasting Certificate of Competency</b>				
Joel S. Gunn		Suspension	1 year susp. w/ 6 months to serve	04/26/06
Wayne E. Martin		Suspension	2 year susp. w/ 1 year to serve	08/03/06
Daniel J. Schmitt		Suspension	1 year susp. w/ 4 months to serve	06/02/06
<b>Fire Equipment Certificate of Competency</b>				
Robert J. Smith		Revoked	Permanent	
Paul F. Witkus		Suspension	Must re-exam	09/28/06
Harlan W. Lunt		Suspension	6 month susp w/ 90 days to serve	09/22/06
<b>Fire Equipment Certificate of Registration</b>				
	Fire-Tec Inc.	Suspension	3 year susp.	03/22/09